

## PUBLICATIONS:

- Parallel Conjugate Gradient: Effects of Ordering Strategies, Programming Paradigms and Architectural Platforms  
*13th International Conference on Parallel and Distributed Computing Systems*, 2000, submitted (with R. Biswas, X. Li, and G. Heber)
- Ordering Unstructured Meshes for Sparse Matrix Computations on Leading Parallel Systems  
*Seventh International Workshop on Solving Irregularly Structured Problems in Parallel*, 2000, to appear. (with R. Biswas, X. Li, and G. Heber)
- System Utilization Benchmark on the Cray T3E and IBM SP  
*Fifth Workshop on Job Scheduling 2000*, submitted (with A. Wong, W. Kramer, T. Kaltz, and D. Bailey)
- Multithreaded Implementation of a Dynamic Irregular Application  
*5th NASA Computational Aerosciences Workshop*, Moffett Field, CA, February 15-17, 2000 (with R. Biswas)
- Parallelization of a Dynamic Unstructured Application using Three Leading Paradigms  
*Supercomputing '99*, 1999. Winner Best Paper Award (with R. Biswas)
- ◊Parallel Tetrahedral Mesh Adaptation with Dynamic Load Balancing  
*Parallel Computing Journal*, Special Issue on Graph Partitioning, to appear (with R. Biswas and H. Gabow)
- Portable Parallel Programming for the Dynamic Load Balancing of Unstructured Grid Applications  
*13th International Parallel Processing Symposium*, 1999 (with R. Biswas, S.K. Das, and D.J. Harvey)
- A Performance Study of Diffusive vs. Remapped Load-Balancing Schemes,  
*11th International Conference on Parallel and Distributed Computing Systems*, 1998 (with K. Schloegel, G. Karypis, V. Kumar, and R. Biswas).
- ◊PLUM: Parallel Load Balancing for Adaptive Unstructured Meshes,  
*Journal of Parallel and Distributed Computing*, 1998 (with R. Biswas)
- ◊Performance Analysis and Portability of the PLUM Load Balancing System,  
*Euro-Par'98 Parallel Processing*, Lecture Notes in Computer Science, Springer-Verlag, 1998 (with R. Biswas, and H.N. Gabow).
- ◊Experiments with Repartitioning and Load Balancing Adaptive Meshes,  
*Grid Generation and Adaptive Algorithms*, IMA Volumes in Mathematics and its Applications, Springer-Verlag, 1998 (with R. Biswas)
- PLUM: Parallel Load Balancing for Adaptive Unstructured Meshes*, Ph.D. Dissertation, University of Colorado, Dept. of Computer Science, Nov. 1997
- Load Balancing Sequences of Unstructured Adaptive Grids,  
*4th International Conference on High Performance Computing*, 1997 (with R. Biswas)
- ◊New Computational Methods for the Prediction and Analysis of Helicopter Noise,  
*Journal of Aircraft*, Vol. 34, No. 5, 1997 (with R.C. Strawn, and R. Biswas)
- Efficient Load Balancing and Data Remapping for Adaptive Grid Calculations,  
*9th ACM Symposium on Parallel Algorithms and Architectures*, 1997 (with R. Biswas)
- Dynamic Domain Decomposition for Large-Scale Adaptive Calculations,  
*10th International Conference on Domain Decomposition Methods*, 1997 (with R. Biswas)
- Parallel Mesh Adaption with Global Load Balancing on the SP2,  
*Proceedings of the NASA Computational Aerosciences (CAS) Workshop*, Moffett Field, CA, Aug. 13-15, 1996 (with R. Biswas, and A. Sohn)
- ◊Parallel Implementation of an Adaptive Scheme for 3D Unstructured Grids on the SP2,  
*Parallel Algorithms for Irregularly Structured Problems* Lecture Notes in Computer Science, Springer-Verlag, 1996 (with R. Biswas, and R.C. Strawn)
- Global Load Balancing with Parallel Mesh Adaption on Distributed-Memory Systems,  
*Proceedings of Supercomputing '96*, Pittsburgh, Pennsylvania, Nov. 17-22, 1996 (with R. Biswas, and A. Sohn)
- Load Balancing Unstructured Adaptive Grids for CFD Problems,  
*Proceedings of the 8th SIAM Conference on Parallel Processing for Scientific Computing, Minneapolis*, Minnesota, Mar. 14-17, 1997 (with R. Biswas)
- ◊Algorithms for Automatic Alignment of Arrays,  
*Journal of Parallel and Distributed Computing*, July 1996 (with S. Chatterjee, J. Gilbert, R. Schreiber, and T. Sheffler)
- Efficient Helicopter Aerodynamic and Aeroacoustic Predictions on Parallel Computers.  
*Thirty Fourth Aerospace Sciences Meeting and Exhibit*, January, 1996 (with A. Wissink, A. Lyrintzis, R. Strawn. and R. Biswas)